

MAPPING THE RISK

Flood Map Update: Baldwin County

Background

The Federal Emergency Management Agency (FEMA) has undertaken a multi-year engineering analyses and mapping effort. The analyses and mapping will better identify, assess, and communicate hazards and risks associated with riverine and coastal flooding in Alabama.

Through this effort, FEMA produced updated Flood Insurance Rate Maps (FIRMs) for Baldwin and Mobile Counties in 2007 and 2010, respectively. However, in these two counties, the mapping effort did not include new engineering analyses. The 2007 and 2010 updates focused primarily on digital conversion of the existing FIRMs using the latest FEMA specifications.

Currently, FEMA has a cooperative agreement with the Alabama Department of Economic and Community Affairs (ADECA) Office of Water Resources (OWR) to assess the risk of riverine and coastal flooding in Baldwin and Mobile Counties with new engineering analyses and to produce updated FIRMs.

Phases of Flood Map Update

The mapping effort is structured around four phases:

1. Scoping
2. Map Production
3. Preliminary FIRM and FIS
4. Effective FIRM and FIS

The table below presents the four phases and *revised* schedules for performance and delivery for Baldwin County. The engineering analyses and mapping efforts for Baldwin and Mobile Counties are being performed in sequence with six northwest Florida counties between Baldwin County, AL and Franklin County, FL. This effort has relied upon collaboration with the Northwest Florida Water Management District (NFWFMD) for coastal surge studies. When the original schedules were developed, it was anticipated that the surge studies would be completed much sooner. The final surge modeling was approved by FEMA and submitted to ADECA OWR in January of 2014. The revised schedule below reflects a more accurate forecast for project milestones now that the coastal surge studies are complete.

<u>PHASE</u>	<u>ORIGINAL SCHEDULE</u>	<u>REVISED SCHEDULE</u>
PHASE 1 – SCOPING	Completed	Completed
PHASE 2 – MAP PRODUCTION	2012 and 2013	Ongoing 2014 through Spring 2015
PHASE 3 – PRELIMINARY FIRM AND FIS	2013	Summer 2015
PHASE 4 – EFFECTIVE FIRM AND FIS	2014	Fall 2016

REVIEW Phase 1 - SCOPING

Phase 1, Scoping, was completed for Baldwin County coastal flooding sources in December of 2010 and for riverine flooding sources in November 2009. During the Scoping Phase, FEMA, ADECA OWR, and Baldwin County stakeholders identified and prioritized the mapping needs for the County. This flood risk decision process utilized data collected from the County and local communities at the Scoping Meeting and included such information as historical flooding information; existing flood hazard data; elevation, hydrologic, and hydraulic data, and base mapping.

Baldwin Coastal Scoping Highlights

The 2007 County-wide Flood Insurance Study and Rate Maps for Baldwin County include 111 miles of detailed coastal studies from the Mobile County line to the Florida State line. These detailed studies were completed in 1983. With the availability of new topographic information for Baldwin County and significant climatological changes and relative sea level rise, the 111 miles of open coastline and interior embayment shorelines were prioritized for re-study with detailed engineering methods.

Baldwin Riverine Scoping Highlights

The 2007 County-wide Flood Insurance Study and Rate Maps for Baldwin County include 191 miles of detailed riverine studies and 453 miles of approximate riverine studies. These studies were completed between 1976 and 1998. Through the Scoping process, 38.2 miles of existing detailed studies were identified for updated engineering analysis, 54.9 stream miles were identified for new detailed studies, and 441.9 miles of existing approximate studies were identified for updated approximate analysis. Note the drop in approximate studies from 453 to 441.9 miles is due to the conversion of 11.1 miles of existing approximate to detailed study. Additionally, 100 miles of detailed studies and 250 miles of approximate studies leveraged from the Baldwin County Planning Commission study will be incorporated in this mapping effort.

Flood Mapping Terms

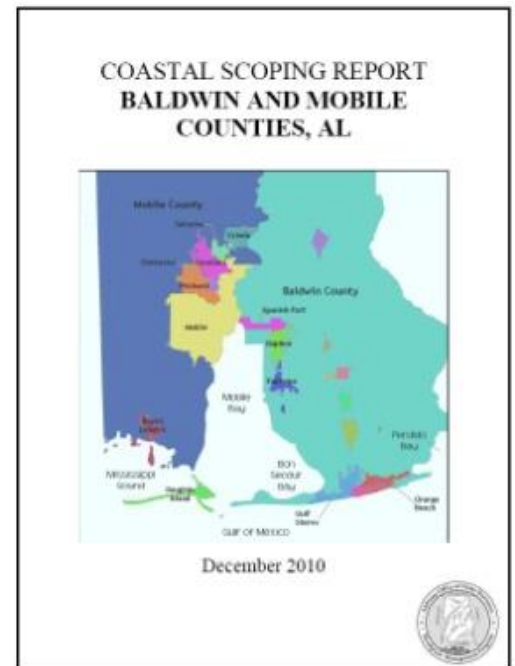
Detailed Study - A flood hazard study that, at a minimum, results in the delineation of floodplain boundaries for the 1-percent-annual-chance (100-year) flood and includes the determination of base flood elevations (BFEs) or flood depths.

Approximate Study - A flood hazard study that results in the delineation of floodplain boundaries for the 1-percent-annual-chance (100-year) flood, but does not include the determination of regulatory BFEs. Approximate flood depths can be provided for non-regulatory use.

Why is the Flood Map Update Important to Me?

Flood Insurance Rate Maps (FIRMs) are important tools in the effort to protect lives and properties in Baldwin County. The FIRMs indicate the risk for flooding throughout the County. However, the current maps are out of date. Some formerly rural areas were never mapped in detail, and other areas haven't been re-mapped in years. Over time, water flow and drainage patterns have changed dramatically due to surface erosion, land use and natural forces. The likelihood of inland, riverine and coastal flooding in certain areas has changed along with these factors. New digital mapping techniques will provide more detailed, reliable and current data on Baldwin County flood hazards.

While the FIRMs will not become effective until 2016, it is important for professionals in the development and building industry to understand what the changes in the new maps are and what they mean. These changes may not only affect how and where structures can be built, but there may be implications to the federal flood insurance requirements. As the preliminary maps become available in 2015, developers and builders can:



- Use the updated map data to determine where and how to build structures more safely and how high to build to reduce the risk of flood damage;
- Assist residents and business owners to re-examine the status of their properties, so that they have proper insurance coverage and can save on costs; and
- Assist residents and business owners with requests for new elevation certificates. Besides those requests that will occur in instances of new construction, requests may also be made by property owners seeking to fulfill the insurance “grandfathering” requirement or those planning to file an appeal or protest during the Public Comment Period.

How can I Participate?

Baldwin County residents are encouraged to visit the ADECA OWR floodplain management website for information about the National Flood Insurance Program (NFIP) and the importance of floodplain management in Alabama:

www.adeca.alabama.gov/floods

The website also includes an in depth Coastal Scoping report describing Baldwin County’s project overview, status, funding and summary of availability of LiDAR. To access this report visit the website referenced above, click on *County Status*, select *Baldwin County*, then click on “*click here to view county activities and maps*”, then click on “*Project Planning Report*”.

FEMA Region IV also provides coastal analysis and mapping information for the Southeast United States. The following website provides an overview of coastal engineering, state specific project information, and addresses frequently asked questions regarding coastal studies, flood insurance, and general flood hazard mapping.

www.southeastcoastalmaps.com

Public outreach activities will continue throughout the flood mapping effort. Baldwin County residents are encouraged to visit the ADECA and FEMA websites, as well as, your local community website for informational updates.

Contact Information

Questions regarding the flood mapping effort should be addressed to the Floodplain Management Branch Chief of ADECA OWR:

Leslie.Durham@adeca.alabama.gov
(334) 353-1955

Distribution Information

In an effort to reach the development and building industry this Outreach Flyer was distributed to the following organizations:

- *Alabama Association of Emergency Managers (AAEM)*
- *Alabama Association of Floodplain Managers (AAFM)*
- *Alabama Chapter of American Planning Association (APA)*
- *Alabama Chapter of American Public Works Association (APWA)*
- *Alabama Section of American Society of Civil Engineers (ASCE)*
- *Mobile Branch of Alabama Section of American Society of Civil Engineers*
- *Alabama Society of Professional Engineers (ASPE, Affiliate of NSPE)*
- *Mobile Area Chapter of Alabama Society of Professional Engineers*
- *Alabama Society of Professional Land Surveyors*
- *Home Builders Association of Alabama*
- *Baldwin County Home Builders Association*
- *South Alabama Regional Planning Commission*
- *Alabama Gulf Coast Recovery Council*

Recommendations for additional development and building industry organizations are encouraged. If there is an organization you would like added to the distribution list, please contact ADECA OWR at the address presented above.